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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/830,332	07/23/2001	Bruno Bessette	3795/OJ121US	6730

7590 08/13/2004

Darby & Darby
 805 Third Avenue
 New York, NY 10022-7513

EXAMINER

WARE, CICELY Q

ART UNIT	PAPER NUMBER
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2634

DATE MAILED: 08/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<p align="center">Office Action Summary</p>	Application No. 09/830,332	Applicant(s) BESSETTE ET AL.	
	Examiner Cicely Ware	Art Unit 2634	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 61-120 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 67-120 is/are allowed.
- 6) ☒ Claim(s) 61-66 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2. | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.
2. The disclosure is objected to because of the following informalities:
 - a. Pg. 11, examiner suggests applicant move line 26 to Pg. 12 for clarification purposes.Appropriate correction is required.
3. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

4. Claim 93 and 112 are objected to because of the following informalities:
 - a. Pg. 15, claim 93, examiner suggests applicant delete indentation for clarification purposes.
 - b. Pg. 22- 23, claim 112, line 37, examiner suggests applicant move line 1 on pg. 23 to pg. 22 or move line 37 to pg. 23 for clarification purposes.Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 61-66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yeldener (US Patent 5,999,897) in view of Iyengar et al. (US Patent 5,444,888) (cited by applicant).

(1) With regard to claim 61, Yeldener discloses in (Fig. 1 (7, 8, 9, 12, 13) and Fig. (2B)) a device for recovering a high frequency content of a wideband signal previously down-sampled and for injecting said high frequency synthesized version of said wideband signal to produce a full-spectrum synthesized wideband signal, said high-frequency content recovering device comprising: a random noise generator for producing a noise sequence having a given spectrum (col. 1, lines 59-64, col. 4, lines 60-66).

However Yeldener does not disclose a spectral shaping unit for shaping the spectrum of the noise sequence in relation to linear prediction filter coefficients related to said down-sampled wideband signal and a signal injection circuit for injecting said spectrally-shaped noise sequence in said over-sampled synthesized signal version to thereby produce said full-spectrum synthesized wideband signal.

However Iyengar et al. discloses in (Fig. 1 and Fig. 3) a spectral shaping unit (Fig. 1 (26)) for shaping the spectrum of the noise sequence in relation to linear

prediction filter coefficients related to said down-sampled wideband signal and a signal injection circuit (Fig. 1 (28)) for infecting said spectrally-shaped noise sequence in said over-sampled synthesized signal version to thereby produce said full-spectrum synthesized wideband signal (Fig. 1 (16), Fig. 3 (68), col. 3, lines 31-51, col. 8, lines 11-16).

Therefore it would have been obvious to one of ordinary skill in the art to modify Yeldener to incorporate a spectral shaping unit for shaping the spectrum of the noise sequence in relation to linear prediction filter coefficients related to said down-sampled wideband signal and a signal injection circuit for infecting said spectrally-shaped noise sequence in said over-sampled synthesized signal version to thereby produce said full-spectrum synthesized wideband signal in order to provide for an artificial wideband speech signal which is of better quality than a narrowband speech signal, without modifying the existing network to actually carry the wideband speech (Iyengar et al., col. 2, lines 49-53).

(2) With regard to claim 62, claim 62 inherits all the limitations of claim 61.

Yeldener further discloses wherein said random noise generator is a random white noise generator for producing a white noise sequence having a flat spectrum over the entire frequency bandwidth of the wideband signal, whereby said spectral shaping unit produces a spectrally-shaped white noise sequence (col. 3, lines 1-2, col. 4, lines 8-11, 55-67).

(3) With regard to claim 63, claim 63 inherits all the limitations of claim 62.

Iyengar et al. further discloses in (Fig. 1) a gain adjustment module (12), responsive to

said white noise sequence (Fig. 1 (16), Fig. 3 (68)) and a set of gain adjusting parameters, for producing a scaled white noise sequence (col. 5, lines 27-36, col. 7, lines 15-26, col. 8, lines 21-24), a spectral shaper for filtering said scaled white noise sequence in relation to a bandwidth expanded version of said linear prediction filter coefficients to produce filtered scaled white noise sequence characterized by a frequency bandwidth generally higher than a frequency bandwidth of said over-sampled synthesized signal version (col. 8, lines 11-16, 17-24); and a band-pass filter responsive to said filtered scaled white noise sequence for producing a band-pass filtered scaled white noise sequence to be subsequently injected in said over-sampled synthesized signal version as said spectrally-shaped white noise sequence (Fig. 1 (16, 22, 26), Fig. 2, Fig. 3 (68), col. 6, lines 64-66, col. 7, lines 1-12, col. 8, lines 11-16, 17-24).

- (4) With regard to claim 64, claim 64 inherits all the limitations of claim 61.
- (5) With regard to claim 65, claim 65 inherits all the limitations of claim 62.
- (6) With regard to claim 66, claim 66 inherits all the limitations of claim 63.

Allowable Subject Matter

- 7. Claims 67-120 are allowed.
- 8. The following is a statement of reasons for the indication of allowable subject matter: The instant application discloses a device for recovering a high frequency content of a wideband signal. Prior art references show similar methods but fail to teach **“a signal fragmenting device for receiving an encoded version of a wideband signal previously down-sampled during encoding and extracting from said**

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encoded wideband signal version at least pitch codebook parameters, innovative codebook parameters, and linear prediction filter coefficients”, as in claims 67, 76, 85, 94 and 112.

Conclusion

9. The prior art made record and not relied upon is considered pertinent to applicant's disclosure:

a. Le et al. US Patent 5,901,178 discloses a post-compression hidden data transport for video.

b. Schreiber et al. US Patent 5425050 discloses a television transmission system using spread spectrum and orthogonal frequency-division multiplex.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cicely Ware whose telephone number is 703-305-8326. The examiner can normally be reached on Monday – Friday, 8-5.

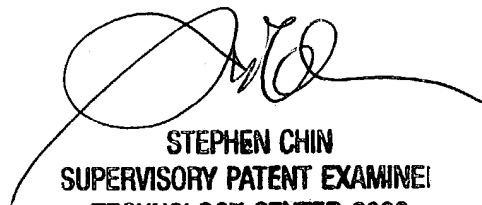
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 703-305-4714. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Cicely Ware

cqw
August 1, 2004



STEPHEN CHIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800